ABSTRACT

The invention relates to a varnish for winding wires, the varnish comprising a copolymer obtained from a thermoplastic or thermosetting resin and containing units derived from silane, and a mineral filler selected from compounds of B, Al, Ti, Zn, Zr, Cr, Fe, silicates, and mixtures thereof. The resin is selected from polyamide imide (PAI), polyester imide (PEI), polyimide (PI), polyester (PE), polyurethane (PU), and polyvinylacetal (PVA). The varnish makes it possible to obtain winding wires of lifetime that is increased by having improved ability to withstand partial discharges and voltage peaks, even at high temperatures. The invention is applicable to manufacturing coils, in particular for variable frequency controllers and converters.